

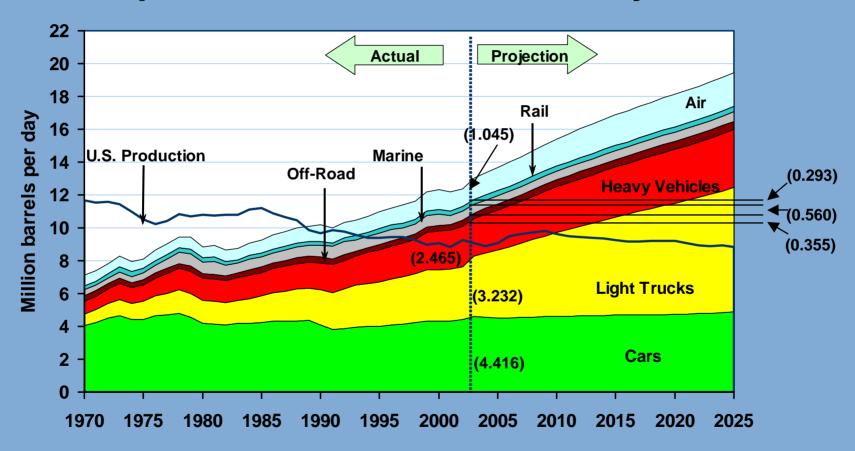
FreedomCAR & Vehicle Technologies Program and Clean Cities

Collaborating to Cut
Oil Dependence

Ed Wall – US Department of Energy FCVT Program Manager Clean Cities Program Review March 6, 2006



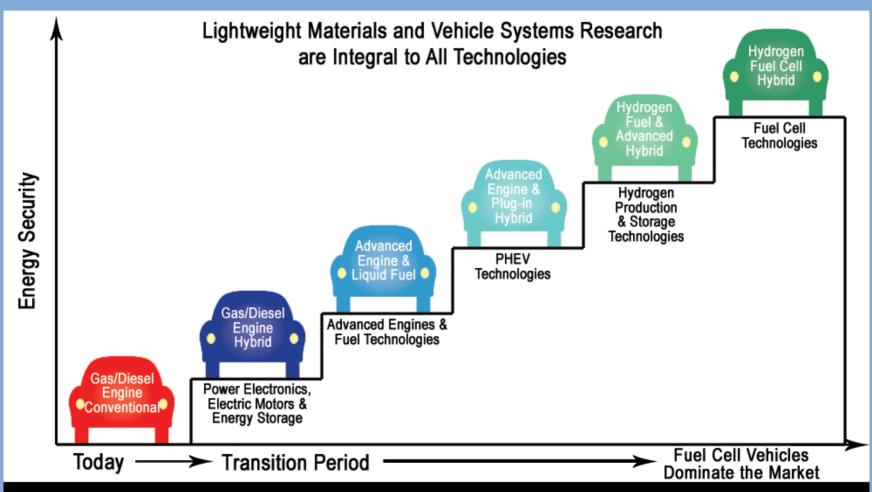
Transportation Petroleum Use - By Mode



Note: Domestic production includes crude oil, natural gas plant liquids, refinery gain, and other inputs. This is consistent with EIA, MER, Table 3.2. Previous versions of this chart included crude oil and natural gas plant liquids only.

Source: <u>Transportation Energy Data Book: Edition 24</u>, ORNL-6973, and <u>EIA Annual Energy Outlook 2005</u>, Preliminary release, December 2004.

Strategic Approach to Transportation Security



FreedomCAR & Vehicle Technologies Organization

FreedomCAR and Vehicle Technologies Ed Wall, Program Manager

FreedomCAR & Fuel
Partnership
Dr. Phyllis Yoshida, Director

21st Century Truck Partnership Ken Howden, Director

Chief Scientist
Dr. James Eberhardt

- Environmental Science and Health Impacts
- SBIR/STTR

Vehicle Technologies
Tien Duong, Team Leader

- Heavy Vehicle Systems
- Energy Storage Technologies
- Adv. Power Electronics
 & Electric Machines
- Hybrid Systems
- Testing and Evaluation

Ancillary Systems

Advanced Materials
Technologies
Rogelio Sullivan, Team Leader

- Propulsion Materials
- Lightweight Materials
- High Temp Materials Lab

Fuels Technologies
Steve Goguen, Team Leader

- Advanced Petroleum Based Fuels
- Non-Petroleum Based Fuels
- EPAct
- Legislative & Rulemaking
- Clean Cities

Engine and Emission Control Technologies Gurpreet Singh, Team Leader

- Combustion and Emission Control
- Light Truck Engine
- Heavy Truck Engine
- Waste Heat Recovery
- Off-Highway Engine

Regional Office Consolidation:

Strengthening DOE with Minimal Disruption of Clean Cities Activities

All Regional Staff will be offered positions at Golden Field Office (GO) or National Energy Technology Laboratory (NETL) in Pittsburgh or Morgantown

Regional staffers will provide the same Clean Cities support after the transition

DOE will refill positions that Regional staff do not take EERE's Project Management Center (PMC)

- Is comprised of the Golden Field Office and the National Energy Technology Lab
- Streamlines and adds consistency to project management;
 Creates synergy between EERE, States, National Labs and other DOE offices, such as Fossil Energy

Target date for transition is July 1st

Recent Developments: Contributing to the Evolution of FCVT and Clean Cities

2006 State of the Union Address: President's Advanced Energy Initiative

- 22% increase in Clean Energy research
- Reduce dependence on Petroleum
 - Biofuels, Battery technology and Hybrid Electric Vehicles including Plug-ins

EPAct 2005

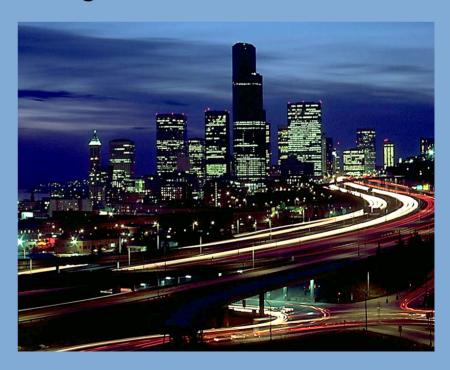
- Consumer tax credits create incentives for blended fuels, infrastructure and vehicles
 - Up to \$4,000 per vehicle for dedicated alternative fuel, energy-efficient hybrid, clean diesel, and fuel cell vehicles.
- New grants through EPA for school districts to purchase emission control retrofit technology
- DOT and EPA address Idle Reduction

Automakers embrace Renewable Fuels:

- GM and Ford plan to produce 400,000 and 250,000 flex fuel vehicles respectively in 2006
- Major promotional campaigns initiated
- DaimlerChrysler approves B20 for use in certain models

Clean Cities Today: Grant Opportunities

- E85 Infrastructure Development
 - \$1.49M will go to National Ethanol Vehicle Coalition
- Petroleum Displacement Technologies
 - \$2M
- Industry Partnership Grants (e.g. biodiesel and propane)
 - \$200,000
 - Cost-sharing with Industry



Petroleum Displacement Grants

- Multi-state and coalition approaches are encouraged
 - E.g. Clean Cities Coalitions, State organizations, energy suppliers, fuel retailers, auto dealers and manufacturers, equipment suppliers, and other stakeholders
- Proposals evaluated on petroleum displaced per dollar spent; past performance; and potential for a successful outcome
- Technologies could include alternative fuel infrastructure, incremental vehicle cost and idle reduction technologies
- E85 proposals must include plans for outreach and image consistency
- Coordinators may propose a management fee if they are substantitively involved in the project



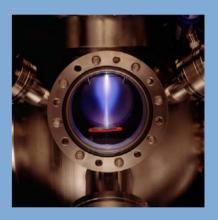
Office of Energy Efficiency and Renewable Energy

http://www.eere.energy.gov









Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable